

WHAT IS CLAIMED IS:

1. An access controller that controls an access to an information resource stored in a storage device, a plurality of the access controllers and the storage devices being connected with a network, the access controller comprising:
 - an access restriction module configured to restrict access to each information resource according to an access control list on which access right to each information resource is recorded;
 - 10 an access interception module configured to intercept an access by an access prohibited user listed on an access prohibition list;
 - an input module configured to input user information corresponding to the access prohibited user; and
 - 15 a list update module configured to update the access prohibition list corresponding to each access controller connected with the network, according to the user information input through the input module.
- 20 2. An access controller in accordance with claim 1, wherein the list update module sends out other access controller a registration instruction to register the input user information on the access prohibition list of the other access controller.
- 25 3. An access controller in accordance with claim 1, wherein the list update module sends out updated access prohibition list to other access controller.
- 30 4. An access controller in accordance with claim 1, wherein the access interception module also intercepts the access that has not

completed.

5. An access controller in accordance with claim 1 further comprising access control list update module configured to update the
5 access control list according to the access prohibition list.

6. An access controller in accordance with claim 5, wherein the list update module deletes the user information on the access prohibition list at a predetermined timing.

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7. An access controller in accordance with claim 6, wherein the predetermined timing is after the update of the access control list has been completed.

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8. An access controller in accordance with claim 6, wherein the predetermined timing is after the update of all access control list has been completed.

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9. An access controller that controls an access to an information resource stored in a storage device, a plurality of the access controllers and the storage devices being connected with a network, the access controller comprising:

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an access restriction module configured to restrict access to each information resource according to an access control list on which access right to each information resource is recorded;

a receiving module configured to receive user information of an access prohibited user, from other access controller;

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a list update module configured to update an access prohibition list, which records user information of access prohibited users, according to the received user information; and

an access interception module configured to restrict the access by reference to the access prohibition list prior to the access control list.

5 10. An access controller in accordance with claim 9, wherein the access interception module also intercepts the uncompleted access.

10 11. An access controller in accordance with claim 9 further comprising access control list update module configured to update the access control list according to the access prohibition list.

15 12. An access controller in accordance with claim 11, wherein the list update module deletes the user information on the access prohibition list at a predetermined timing.

13. An access controller in accordance with claim 12, wherein the predetermined timing is after the update of the access control list has been completed.

20 14. An access controller in accordance with claim 12, wherein the predetermined timing is after the update of all access control list has been completed.

25 15. An access control system in which a plurality of storage devices for storing information resources and access controllers for controlling accesses to the information resources are connected with a network, each access controller comprising:

30 an access restriction module configured to restrict access to each information resource according to an access control list that

records access right to each information resource;

an access interception module configured to restrict the access by reference to an access prohibition list, which records user information of access prohibited users, prior to the access control list;

5 at least one of the access controllers corresponding to the updated access prohibition list further comprising a distribution module configured to send out the user information or the updated access prohibition list to other access controller in response to the update; and

10 the other access controller further comprising a list update module configured to receive the user information or the updated access prohibition list and to update the access prohibition list of the other access controller.

15 16. An access control system in accordance with claim 15, wherein the distribution module broadcasts the user information or the updated access prohibition list over all of other access controllers.

20 17. An access control system in accordance with claim 15, wherein the distribution module of each access controller sends out the user information or the updated prohibition list to predetermined another access controller, thereby transmitting the user information or the updated prohibition list from one access controller to another.

25 18. An access control system in which a plurality of storage devices for storing information resources and access controllers for controlling an access to the information resources are connected with a network, each access controller comprising:

30 an access restriction module configured to restrict access to each information resource according to an access control list on which

access right to each information resource is recorded;

an access interception module configured to restrict the access by reference to an access prohibition list, which records user information of access prohibited users, prior to the access control list;

5 a distribution module configured to broadcast the user information to other access controller in response to update of own access prohibition list;

a list update module configured to update own access prohibition list in case of receiving the user information;

10 an access control list update module configured to update the access control list according to the user information after updating the access prohibition list; and

15 a user information deletion module configured to delete the user information from the access prohibition list after updating the access control list.

19. An access control method for controlling an access to an information resource stored in a storage device, the method is executed by an access controller in a system where a plurality of the 20 access controllers and the storage devices are connected with a network, the method comprising the steps of:

restricting access to each information resource according to an access control list on which access right to each information resource is recorded;

25 intercepting an access by an access prohibited user listed on an access prohibition list;

inputting user information corresponding to the access prohibited user; and

30 updating the access prohibition list corresponding to each access controller connected with the network, according to the input

user information.

20. An access control method for controlling an access to an information resource stored in a storage device, the method is
5 executed by an access controller in a system where a plurality of the access controllers and the storage devices are connected with a network, the method comprising the steps of:

restricting access to each information resource according to an access control list on which access right to each information resource
10 is recorded;

receiving user information of an access prohibited user from other access controller;

15 updating an access prohibition list on which user information of access prohibited users is recorded, according to the received user information; and

restricting the access by reference to the access prohibition list prior to the access control list.

21. An access control method for controlling an access to information resources in an access control system where a plurality of storage devices for storing information resources and access controllers are connected with a network, the method comprising the steps of:

each access controller restricting access to each information
25 resource according to an access control list on which access right to each information resource is recorded;

each access controller restricting the access by reference to an access prohibition list, which records user information of access prohibited users, prior to the access control list;

30 at least one of the access controllers corresponding to the

updated access prohibition list sending out the user information or the updated access prohibition list to other access controller in response to the update; and

the other access controller receiving the user information or the
5 updated access prohibition list and updating the access prohibition list
of the other access controller.

22. A computer readable recording medium in which a computer program executed by an access controller to control an
10 access to an information resource stored in a storage device is stored, the computer program being executed in a system where a plurality of the access controllers and the storage devices are connected with a network, the computer program comprising:

a first program code for restricting access to each information
15 resource according to an access control list on which access right to each information resource is recorded;

a second program code for intercepting an access by an access prohibited user listed on an access prohibition list;

a third program code for inputting user information
20 corresponding to the access prohibited user; and

a fourth program code for updating the access prohibition list corresponding to each access controller connected with the network, according to the input user information.

25 23. A computer readable recording medium in which a computer program executed by an access controller to control an access to an information resource stored in a storage device is stored, the computer program being executed in a system where a plurality of the access controllers and the storage devices are connected with a
30 network, the computer program comprising:

- a first program code for restricting access to each information resource according to an access control list on which access right to each information resource is recorded;
- 5 a second program code for receiving user information of an access prohibited user from other access controller;
- a third program code for updating an access prohibition list on which user information of access prohibited users is recorded, according to the received user information; and
- 10 a fourth program code for restricting the access according to the access prohibition list prior to the access control list.